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AUTHOR'S NOTE

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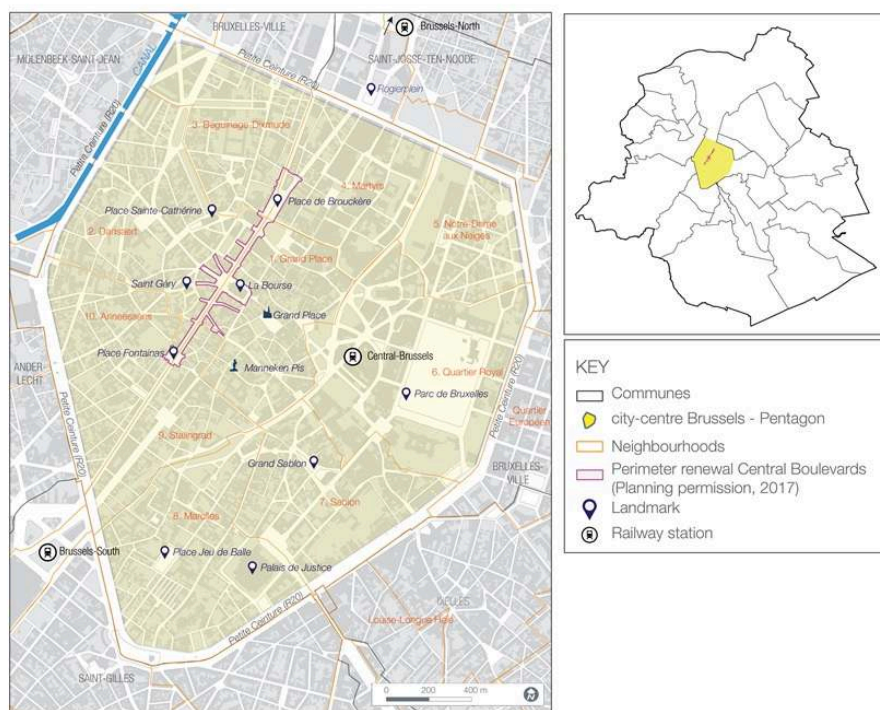
Introduction

- 1 Planned since the end of the 1990s, announced in 2012 and effective since 29 June 2015, the pedestrianisation of the central boulevards, i.e. from Boulevard Anspach which links Place De Brouckère to Place Fontainas (Figures 1 and 2), is unquestionably – for the centre of Brussels – the most significant urban project of the last decade as well as this one for the centre of Brussels. More than just the development of public space, the “pedestrian area” concerns many dimensions and levels in the making of the city. It

provides major opportunities for the city centre as well as for the Brussels-Capital Region (BCR) and the Brussels metropolis. The feedback from other cities in Belgium and abroad illustrates that pedestrianisation may transform the urban space fundamentally by having an impact on its social, environmental, economic and cultural dimensions, but at the same time, its success is not a given [Ghel, 2011; Ferial, 2013; Boussauw, 2016].

- 2 The outline of this synopsis¹ is based on the work by the Brussels Studies Institute – Brussels Centre Observatory (BSI-BCO) in which the authors were closely involved: we shall focus on the pedestrianisation of the central boulevards of Brussels as an important trigger and nodal point for rethinking not only the city centre but also the urban and metropolitan development of Brussels as a whole. Firstly, we shall briefly describe the general framework of pedestrianisation: the international trends, the expectations of the Brussels project, its challenges and the main factual data concerning it, as well as recent developments. Secondly, based on the literature regarding other cities and the contextual analysis of the centre of Brussels, we shall reexamine the four main challenges and debates which we have discussed in the past (Hubert *et al.*, 2017), and which we feel the project has had to face, along with a series of ideas for public action.

Figure 1. Map of the pedestrianised central boulevards of Brussels



Data: City of Brussels, 2017; SumProject & B-Group-Greisch, 2015. UrbIS Release 2016Q2. CC-BY 2.0. CIRB-CIBG-BRIC. Update: Sofie Vermeulen.

Figure 2. View of boulevards before pedestrianisation (2013), after pedestrianisation (2016) and after development works (2020)



Sources from left to right respectively: 罗布泊, 2013; BSI-BCO, 2016; Michel Hubert, 2020.

1. Framework

1.1. Pedestrianisation: an urban development instrument

1.1.1. From functionalist project to urban project

- 3 The transformation of the streets of many European cities into spaces dedicated almost exclusively to traffic (to the detriment of non-motorised functions) and the gradual domination of cars (at the expense of other modes) in these spaces is the fruit of a long transformation process begun at the end of the 18th century [Loir, 2016]. The first pedestrian areas, which appeared in 1959 in Germany (Kettwiger Straße in Essen) and in the United States (Burdick Street in Kalamazoo), constituted as it were the outcome of this specialisation of the public space. They emerged as the complement to the urban configuration dominated by cars and rapid modes of transportation. Advocated in particular since the 8th International Congress for Modern Architecture (CIAM) in 1951, the pedestrianisation of certain main roads in city centres was a subject of discussion, publication and study trips, and became widespread in the 1970s [Brandeleer *et al.*, 2016a]. According to a functionalist approach, these pedestrian areas – which we can qualify as “first-generation” – consisted in a strict separation of modes of travel without calling into question the use of cars in the city, and were usually created in main roads with a high commercial and/or tourist potential. The 1972 ban on parking in the Grand-Place in Brussels² and the pedestrianisation of Rue Neuve in 1975 are clearly part of this logic. As a result of policies in favour of car use, these pedestrian areas were not able to prevent the car traffic which increased greatly during the post-war years in urban centres. The projects developed at the time in the United States have been cited in particular due to their failures in this respect [Ferial, 2013].
- 4 Since the beginning of the 2000s, pedestrianisation has played a major role once again in the debates and projects related to urban development in Europe. The rationale behind many of these “second-generation” pedestrianisation plans is not one of separation, but rather of a connection and co-existence between modes of travel [Ferial, 2013] and activities. This involves the combination of walking, cycling (and other light modes), public transport and/or limited car traffic according to the reference of shared space [Brandeleer *et al.*, 2016a; Janssens and Vanderstraeten, 2016]. The idea of public space in which the different modes of travel and activities exist in harmony – the logic which prevailed to a certain extent until the beginning of the 20th century [Jourdain and Loir, 2016; Loir, 2016] – thus re-emerged through a new way of connecting speed and slowness [Pelgrims, 2018].

Table 1. Comparison of different types of shared space – pedestrian, residential and gathering areas – according to the traffic code

	Pedestrian area	Residential area	Meeting area
Function	Mainly commerce/ tourism	Housing environment	Housing environment, artisans, commerce, tourism, education, recreational activities
Relationships between users	Pedestrians have priority in all cases	Pedestrians have priority but mix of modes and uses (pedestrians may not hold up traffic unnecessarily)	
Access and car traffic			
Access	Forbidden except in specific cases	Authorised	
Speed	Walking speed for exceptions	20 km/h, speed limited by speed bumps (in the case of residential areas), a non-linear development and a delimiting of start and end of the area (pavement across, etc.)	
Parking	Forbidden, authorised stop in certain cases	Forbidden except in defined areas, authorised stop	
Deliveries	If authorised, only at specific times	Authorised in clearly identified areas with the least possible impact on pedestrians	
Cyclists	Forbidden, but where authorised, obligation to get off bicycle when there are too many pedestrians	Authorised	
Public transport	Authorised	Forbidden	Authorised
Specific development according to traffic code	No specific development required, apart from signs at start and end of the area	Specific development to guarantee the co-existence of modes (urban furniture, plants, etc. positioned in order to limit speed of vehicles and determine their route), development of street level, removal of pavements, delimiting of start and end of the area (signs + difference in level, for example), delimiting of parking spaces	

Source: Brandeleer *et al.*, 2016a, p. 166.

- 5 This transition from a rationale of separation to one of connection meant that pedestrianisation would be thought of more in terms of an urban project in the sense that it “allows developments to be considered for the city as a whole, without limiting

interventions to single blocks” [Fériel, 2013: 5]. The reorganisation of the sharing of public space between modes of travel and other traffic and living functions (walking, strolling, games, events, etc.) no longer attempts only to organise the functionality of the city, but also to ensure usability, social cohesion, entertainment, tourism, etc. in keeping with the territorialisation of socioeconomic policies and, more recently, environmental policies [Pinson, 2004, 2009; Dessouroux *et al.*, 2009; Genard and Neuwels, 2016].

1.1.2. The positive potential role of pedestrianisation

- 6 Today, pedestrianisation constitutes a fully fledged urban development instrument whose potential role has been discussed in the international literature [Ghel, 2011; Boussauw, 2016; Keserü *et al.*, 2016]. In the cities studied, pedestrianisation has:
 - Led to a series of positive effects with respect to mobility choices, by promoting active modes of travel (bicycle, walking, etc.), the adaptation of delivery systems in favour of alternative systems and the improvement of public transport services;
 - Had a positive impact on the accessibility of the city, by decreasing car traffic and improving the performance of public transport in pedestrian areas;
 - Resulted in better sharing between modes of travel and the freeing of spaces which were formerly dedicated to cars, thus allowing an improvement in the sustainability of more and more densely inhabited cities;
 - Improved the quality of life and the health of inhabitants and workers by reducing air and noise pollution due to road traffic;
 - Participated in the fight against global warming by reducing carbon emissions due to car traffic;
 - Turned out to be beneficial – after an eventual downturn – for commercial activity and therefore for the creation of jobs, due to an average increase in the number of visitors and in revenue;
 - Established places for sociocultural activities, quality interactions and social cohesion;
 - Led to the development of green spaces and contributed to urban biodiversity and the improvement of the local microclimate;
 - Created an opportunity to promote architectural heritage.
- 7 As underlined in the second part of this synopsis, the literature shows, however, that the success of pedestrianisation projects is not a given. It may be threatened by the fragmentation of the institutional levels involved (among themselves and within themselves), by power relations which do not allow the project to be brought to a successful conclusion, by failures in the governance tools used (strategic plans, economic incentives, participatory processes, etc.) or by a lack of clarity in the objectives pursued.

1.2. The pedestrianisation of central boulevards in Brussels

1.2.1. From shared space to the urban motorway

- 8 As an extension of the “comfort zone” established gradually around the Grand-Place in the 2000s, the pedestrianisation of the central boulevards is presented as an urban development tool by the City of Brussels. More specifically, it emerges as the expression and formalisation of a paradigm shift with respect to post-war urban

policies: a means of giving “the necessary impetus to the economic, cultural and social revival”³ of the centre of Brussels, which, over time, has become “a grey and increasingly crowded space (...) dominated by cars”. The objective is to make the city centre “more welcoming, greener, more breathable – a guarantee of better health and well-being for everyone”, and for “citizens (local inhabitants, workers, tourists and shopkeepers) to reclaim the public space and enjoy a healthier and more breathable city”.⁴

- 9 The challenges for the centre of Brussels are indeed great. Beginning in the 1950s, it was considered – by the public authorities in particular – above all as an administrative space and a place of consumption to the benefit of peri-urban residents, as well as “one of the biggest crossroads in the western world” [Ministère des travaux publics et de la reconstruction, 1957: 8]. The Brussels territory was then transformed by a major expansion of the road network for three decades as of the world fair in 1958 [Demey, 1992; Hubert, 2008; Ryckewaert, 2011].
- 10 Built in the 19th century after the covering of the Senne, the central boulevards were connected to this network via the transformation of the inner ring into a main road for heavy traffic (as of 1955) and redeveloped following the creation of the pre-metro (inaugurated in 1976). At the time, these boulevards were designed to be what would be referred to today as a “gathering area” [Jourdain and Loir, 2016], yet over time the room left for pedestrians was severely restricted and was limited to the pavements, which were cluttered with flower boxes, café terraces and access points to the underground stations. Far from being as functional as planned, the central boulevards soon became a congested urban motorway at the heart of Brussels (also referred to as the Pentagon). At the same time, the surrounding working-class neighbourhoods degraded and became poor areas following the deindustrialisation of the nearby canal area (in particular the central part), the urban exodus, the disinterest of the public authorities and the speculative strategies favouring the dilapidation of buildings in order to justify demolition/reconstruction operations [Aron, 1978; Grosjean 2010; Ryckewaert, 2011]. Traffic congestion, air and noise pollution and the development of the service sector therefore created a vicious circle of the deterioration of the living environment: as the city centre decayed, the residential attractiveness and therefore the municipal revenue decreased, thus making the development of urban renewal operations more difficult [Zimmer, 2002].

1.2.2. The restructuring of the city centre

- 11 Beginning in the 1980s, politicians began to worry about the industrial and residential decline of the centre of Brussels [Hubert, 1982]. The public authorities gradually became interested once again in the central neighbourhoods, through “neighbourhood contracts” in particular (beginning in 1993), from a perspective of urban revitalisation and social cohesion [Noël, 2009]. For its part, the City of Brussels created a Délégation au Développement du Pentagone (DDP, Pentagon Development Delegation) (1995), and with the help of different instruments in the fight against empty buildings (industrial buildings in particular), it obtained rapid results.⁵ The Pentagon thus experienced steady demographic growth as of 1999-2000 (+/- 2,2 % per year between 2000 and 2011), at a rate which was close to twice as high as that for the Region as a whole (+/- 1,1 % per year during the same period). Today, the centre of Brussels is a densely inhabited space, in particular in the western part, where there is an over-representation of

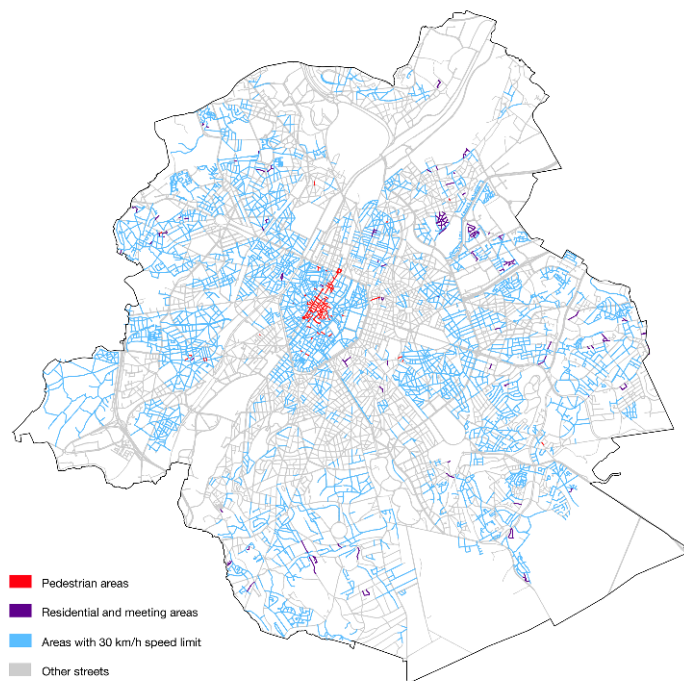
people aged 20-34 [Decroly and Wayens, 2016]. In the Pentagon, there are more than 50 000 inhabitants,⁶ which represents just under 5 % of the regional population in 2,5 % of its area.

- 12 This demographic growth is heterogeneous from a socioeconomic point of view. The south and southwest parts of the Pentagon are mainly home to disadvantaged populations, whereas the other parts (northwest, east) are undergoing gentrification, attracting young (and not so young) adults from privileged backgrounds, at least as regards cultural capital [Van Crieelingen, 2006, 2013; Bernard, 2008], as well as investors [Dessouroux *et al.*, 2016]. This heterogeneity is also seen in the quality of housing.
- 13 Finally, the centre of Brussels is characterised by significant economic and sociocultural activity [Decroly and Wayens, 2016]. It constitutes a major employment centre, with administrative, financial, commercial (dominated by clothing shops and the restaurant sector, as well as specific businesses with a wide reach), health and educational functions. The city centre also constitutes the main tourist and cultural centre in the Region, concentrated around the Îlot Sacré (Grand-Place and surroundings), the central boulevards and Mont des Arts.

1.2.3. A high level of road congestion with many consequences

- 14 Road transport is the biggest cause of air pollution in European cities, with a significant impact on health [Keserü *et al.*, 2016; Da Schio *et al.*, 2018]. According to Bruxelles Environnement [2016], in 2012, it was the main sector responsible for the emission of three major air pollutants in BCR: nitrogen oxides (NOx – 67 %), carbon monoxide (CO – 49 %) and fine particles (PM10 – 48 %). It was also responsible for 16 % of lead and non-methane volatile organic compounds (NMVOC) emissions and the second sector responsible for the direct emission of greenhouse gases (26 % in 2013). The noise pollution caused by car traffic also has a negative impact on health by increasing the risk of ischaemic heart disease, high blood pressure, tinnitus and hearing problems [Keserü *et al.*, 2016].
- 15 Currently in BCR, the sharing of space between the different modes of travel takes place mainly through isolated interventions which restrict the access and the speed of cars: areas with 30 km/h speed limit, speed bumps, widening of pavements and parking barriers, dedicated lanes for public transport, etc. [Moritz, 2011; Brandeleer *et al.*, 2016b]. Pelgrims (2018) describes these interventions very precisely as mechanisms for speed *domestication*, speed *externalisation* (outside perimeters where car traffic is deliberately slowed down or prohibited) and speed object *invisibility* (with street parking restrictions and support for the reinforcement of off-street parking). In Brussels (Figure 3), the proportion of pedestrian, residential and gathering areas is relatively low with respect to the European pedestrianisation movement which has been developing since the early 2000s [Brandeleer *et al.*, 2016a], but has increased greatly in recent years without any continuity between these areas today.

Figure 3. Pedestrian and residential areas and areas with 30 km/h speed limit in BCR



Author: Thomas Ermans. Data: Bruxelles Mobilité, MobiGIS v2.0, March 2020

- 16 Furthermore, while a rapid evolution of travel practices has been observed in the Region in terms of greater multimodality (combination of the use of a car, public transport, walking, bicycle, etc. for a single trip or depending on the trip) and a reduction in the use of the car [Lebrun *et al.*, 2013, 2014; SPF Mobilité et Transports, 2019], this evolution scarcely compensates for the increase in the total volume of travel due to the demographic boom and must adapt to the continued high rate of use of the car for inbound and outbound travel [Hubert *et al.*, 2013; Ermans *et al.*, 2019]. Furthermore, the concentration of motorised traffic on regional and metropolitan roads – excluding residential neighbourhoods – has not helped to reduce congestion [Brandeleer *et al.*, 2016b].

1.2.4. The pedestrianisation of central boulevards: a turning point in a long decision process

- 17 It is in this context of demographic growth and reorganisation of the city centre, followed by road congestion and noise and air pollution, and finally, the expectation for inhabited public space and quieter traffic, that we must understand the decision to take strong action, consisting in pedestrianising the central boulevards in Brussels.
- 18 While the first study – referred to as “Simons” – conducted by the architecture and urbanism firm Groep Planning – later to become SumProject – on mobility in the Pentagon dates from 1997/98, the *renovation* of central boulevards only became part of the political agenda of the City of Brussels in 2003, in the framework of Fonds Beliris⁷ [Vanhellemont with Vermeulen, 2016]. A more in-depth study was then assigned to Groep Planning, without immediate follow-up. While there was support from civil

society for a reduction in road congestion (see Plan NoMo in 2000⁸), it took several years before the first concrete actions were implemented: the closure to car traffic of approximately ten streets around the Grand-Place (referred to as the “comfort zone”), whose planning permission was granted at the end of 2009, and the reduction of lanes for car traffic on boulevards Anspach, Lemonnier and Adolphe Max to the benefit of the development of bicycle paths in 2012. Finally, following the arrival of Yvan Mayeur as the mayor of the City of Brussels in 2013 (replacing Freddy Thielemans), the renovation of central boulevards – decided on by the liberal/socialist municipal majority after the 2012 elections – became clearer, with the decision to pedestrianise Boulevard Anspach between Place De Brouckère and Place Fontainas, and thus extend the comfort zone around the Grand-Place. This evolution was justified in particular with regard to citizen movements, which called for the renovation of central boulevards in order to reduce car traffic, without specifically advocating their pedestrianisation (in particular, PicNic the Streets in May 2012, as well as ParcAnspachPark call for ideas organised by BRAL in July 2013) [Tessuto, 2016; Vanhellemont, 2016].

Table 2. Main strategic plans concerning mobility and/or the renovation of central boulevards in the centre of Brussels before pedestrianisation

Name of the plan	Stakeholders and status
Tekhné Plan – 1962	<p>“Master plan for the Brussels Pentagon”.</p> <p>Urban development master plan for the entire Pentagon (horizon 1985).</p> <p>Carried out by Groep Tekhné.</p> <p>Commissioned by the City of Brussels – Alderman for Urban Development Van den Boeynants (CVP).</p> <p>Partly executed project.</p>
Simons Study – 1997/1998	<p>Mobility study for the Pentagon – 3 scenarios for a car-free city centre.</p> <p>Within the framework of the preparation of a Municipal Mobility Plan for the City of Brussels.</p> <p>Carried out by Groep Planning (now SumProject).</p> <p>Commissioned by the City of Brussels, Alderman for Urbanism H. Simons (Ecolo).</p> <p>Project never carried out, but resulted in the following plans.</p>
NoMo Plan – 2000	<p>Proposal by the non-profit organisation NoMo (experts and residents) on its own initiative for “50% less cars in the Pentagon”.</p> <p>Based on one of the three scenarios – the most ambitious – from the study by Simons (1997).</p> <p>Project never carried out, but served as a reference for a long time in the non-profit sector and prompted the Beliris Plan (2003).</p>
Beliris Plan – 2003	<p>Study for the development of the central boulevards.</p> <p>Carried out by Groep Planning (now SumProject).</p> <p>Commissioned by Beliris, for a project competition.</p> <p>Budget granted, but project never carried out.</p> <p>Led to the Simons Plan (2004) and the Ceux Plan (2010)</p>

Simons Plan – 2004	<p>Mobility study for the City of Brussels on the development of the central boulevards.</p> <p>Carried out by Cooparch-RU (now ERU), under the auspices of AGORA.</p> <p>Commissioned by the City of Brussels, Alderman for Urbanism H. Simons (Ecolo).</p> <p>Study based on preliminary studies and scenarios proposed in 1998.</p> <p>Approved by municipal council but never carried out.</p>
Ceux Plan – 2010	<p>Mobility study for the City of Brussels (Pentagon section, p. 91).</p> <p>Within the framework of the preparation of a Municipal Mobility Plan for the City of Brussels.</p> <p>Carried out by Espaces mobilités and Transitec.</p> <p>Commissioned by the City of Brussels, Alderman for Urbanism C. Ceux (cdH).</p> <p>The study takes into account the regional strategic development and mobility plans (PRD II & IRIS II plans), but is not based on the Simons plans (1997/1998 and 2004).</p> <p>Never approved by municipal council.</p>

Source: Vanhellemont with Vermeulen, 2016, p. 48

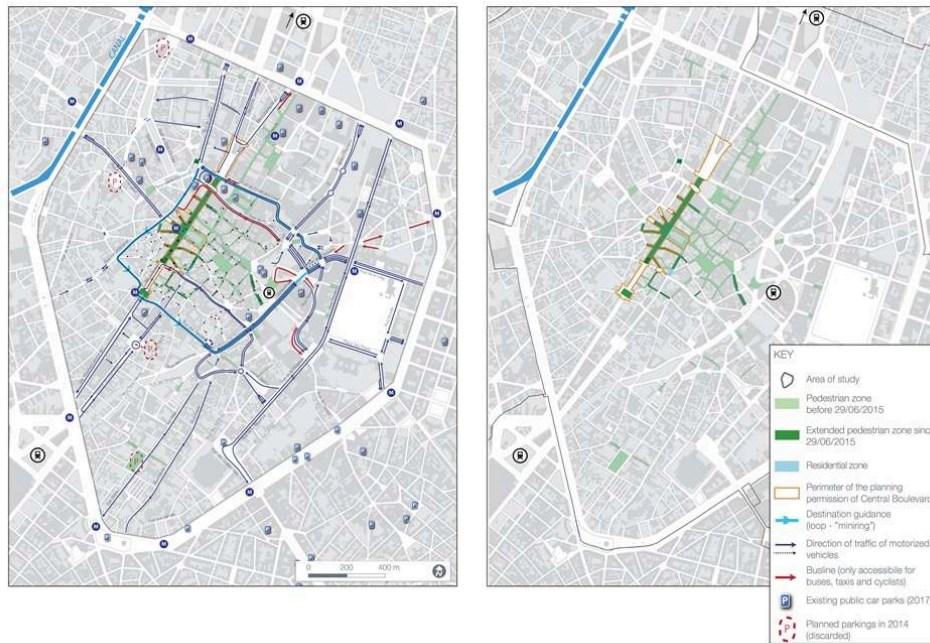
- 19 The renovation of the central boulevards was therefore not included on the political agenda for a long time, which was less due to the need to prepare the project with many technical studies, than to the fear of decision-makers to take on an urban project of such vast scope. Courtois and Dobruszkes [2008] and Brandeleer and Ermans [2016b] have shown that this feebleness is common in Brussels when it comes to reducing the spatial and temporal ascendancy of cars at communal and regional level. This results in an “over-emphasised importance of car users in the development of the city and mobility management” [Courtois and Dobruszkes, 2008: 19]. At the same time, Brussels is characterised by a network of relatively narrow roads, which makes the balanced coexistence of active modes of travel, public transport and car traffic complex and sometimes even impossible [Brandeleer *et al.*, 2016b].

1.2.5. Controversies and a compromise to “take action”

- 20 Given the above, the implementation of the pedestrian area in Brussels appears to be an eminently political act [Vanhellemont, 2016]. Encouraged by the last citizen mobilisation efforts (PicNic the Streets) on the eve of the municipal elections of 2012, this “taking of action” was possible at the time thanks to a great political compromise within the new municipal majority: pedestrianise a section of the central boulevards, provided that four new local car parks would be built, and reorganise the traffic in the adjacent streets.⁹ This involved ensuring accessibility by car for visitors and inhabitants who were used to using or forced to use their cars, while making up for the disappearance of parking spaces in the pedestrian area [Keserü *et al.*, 2016].
- 21 However, this compromise has blurred the political aim of the project and has generated considerable controversy. The announced development of four new car parks in the immediate surroundings of the pedestrian area was understood to be a strategy to render cars invisible, to the detriment of a policy to reduce road congestion in the city centre [Genard and Neuwels, 2016]. The reorganisation of traffic into a service ring around the pedestrian area was described as a “mini ring road”, testifying

to the fear that the traffic and pollution would move to the surrounding neighbourhoods (Figure 4).

Figure 4. Traffic plan and pedestrian areas in the centre of Brussels - June 2016



Data: City of Brussels, 2014 and 2017; SumProject & B-Group-Greisch, 2015. UrbIS Release 2016Q2. CC-BY 2.0. CIRB-CIBG-BRIC. Update: Sofie Vermeulen.

- 22 The lack of clarity of the political aim was also reinforced by the decision to increase the distance between bus stops and by the removal of certain dedicated lanes, which have harmed the clarity and efficiency of the public transport surface network [Keserü *et al.*, 2016], as well as by the coexistence of a rationale in support of “a city built for its inhabitants”¹⁰ and statements and actions in keeping with the perspective of economic attractiveness (make De Brouckère a “Times Square”, make the pedestrian area a “Belgian Avenue” then a “Family Pleasure Shopping”, transform the Bourse into a “Beer Temple”, etc.) [Vanhellemont, 2016; Genard *et al.*, 2016].
- 23 Compromises are inevitable in the framework of the implementation of major urban projects [Le Galès, 1995; 2002]. However, in the case of the pedestrian area in Brussels, the resulting lack of transparency means that these compromises may in the end become more divisive than unifying, and more ineffective than effective, if they are not explained and supported. The pedestrian area has indeed been the subject of many controversies and opposition movements. And the context of these controversies is complex, especially as the future of the city centre concerns many stakeholders, levels of authority and urban governance challenges, well beyond the local challenges [Vanhellemont with Vermeulen, 2016; Genard *et al.*, 2016].

1.2.6. Difficult implementation in a context of indeterminacy yet exponential attendance

- 24 On June 29, 2015, Boulevard Anspach was closed to car traffic and temporary facilities were set up (wooden furniture, ping-pong tables, etc.). During the summer period,

there was a good-natured atmosphere in the area during the day, which was more tense in the evening. But very soon, the implementation of the project was held back. The international context, with the Minister of the Interior's introduction of a lockdown following the attacks in Paris (November 2015), followed by the attacks in Brussels (March 2016), placed a leaden weight on the centre of Brussels, particularly its pedestrian area, henceforth patrolled by armed soldiers. Tourism was plummeting, and concern about the future was palpable. At the same time, the accessibility of the city centre by car was being undermined by what would be referred to as the “tunnel crisis”.¹¹ While the media announced from the outset the start of works on the pedestrian area,¹² this was delayed for more than two years, in particular by several appeals against applications for planning permission. As Fenton *et al.* [2020] explain, “For many residents and merchants in the city centre, this period was experienced quite negatively and the boulevard was perceived as having been abandoned, left to its own devices by the authorities. The lack of communication as to the next steps, combined with the presence of temporary facilities considered by some to be of poor quality as well as indecision in terms of road management, were sources of concern and a feeling of stagnation, conveying negative ideas about the implementation of the project. What is more, temporary facilities led to uses which some residents and merchants in the area vigorously complained about.”

- 25 Work finally began in 2017 and, section by section, the boulevard was redesigned, as well as the Bourse and De Brouckère metro stations. However, a certain degree of indeterminacy [Fenton *et al.*, 2020] continued to be an integral part of the project in terms of the regulatory status of the road infrastructure in certain places (Place De Brouckère or south of Boulevard Anspach, for example), communication and citizen consultation, as well as political aims.
- 26 Meanwhile, private investors, particularly Whitewood and Immobel, were not idle and clearly believed in the future of the city centre. These two groups were involved in the renovation of Centre Monnaie (soon deserted by the city administration), the Allianz block (De Brouckère) and the former Tour Philips.
- 27 It should also be noted that a new Mayor, Philippe Close, was appointed in July 2017 following the resignation of Yvan Mayeur, following the SAMU SOCIAL scandal. This allowed the Socialist Party to revive itself just in time for the municipal elections in October 2018. This resulted in a new Socialist-Ecologist majority (plus Défi) which is expected, among other things, not to go back on the parking projects of the previous majority and to improve the accessibility of the city centre by public transport.
- 28 Before the covid crisis, the number of pedestrians in the pedestrian area was growing rapidly, especially during major events such as the start of the Tour de France or Plaisirs d'hiver, and tourism was breaking new records only three years after the attacks. Only the renovation of Place de la Bourse and Place Fontainas was still in progress and was to be completed by the summer of 2020. The transformations in the centre of Brussels, particularly in terms of property, had only just begun. The two months of lockdown (from mid-March to mid-May 2020) in Belgium and in many other countries, as well as the uncertainties which followed, calls into question the future of urban centres in a harsh and disproportionate manner with respect to previous crises.

2. Observations and challenges

- 29 The second part of this chapter explains what we feel are the four main challenges faced by the project to renovate the centre of Brussels. Based on a certain number of observations in the international literature and specific knowledge regarding Brussels, it aims to contribute to the objectification of debates on the future of the centre of Brussels, as well as to their evolution.

2.1. Challenge 1: Clarify and reach the objectives of the development of public space by taking action on the intangible – “life between buildings”¹³

- 30 Established by the architecture and urbanism firm SumProject, the development plan for the public pedestrian space – when it was created in 2015 – proposed a division of the central boulevards into a series of spaces, each with a specific name designating an atmosphere: an “urban garden”, a “green walk”, an “urban scene”, a “home” and an “agora”. Currently, only the spatial aspects of these developments have been defined and largely implemented (materials, equipment, plants, etc.). While urban development and the organisation of activities in the public space structure in part the behaviour of the different users (inhabitants, workers, visitors, etc.), they may not regulate it completely. There are several different uses, changes of use and conflicting uses which constitute the fundamental unpredictability of the ways in which users appropriate the space, and which are well documented in urban studies [Corijn and Vanderstraeten, 2016; Gehl, 2011; Lofland, 1998; Jacobs, 1993].
- 31 In order to reach the objectives of a pedestrian area, there is a need for action involving more than the development of public space. There must be action involving the intangible aspects as well (uses, sociability, symbolic actions, etc.). The main challenge in this respect is to know how – with which instruments of governance, public policies and partnerships – to improve and ensure the continued existence of desirable social practices and their diversity in this reorganised public space, particularly in a covid context.

2.1.1. Guarantee the diversity of atmospheres and uses of the public space

- 32 By detailing its development, the pedestrian area of the centre of Brussels differs from the pedestrian areas and shared spaces recently built in the Brussels-Capital Region based on a freeing up of space through minimum use (for example, Place Flagey, Place de la Monnaie or Chaussée d'Ixelles). SumProject's plan defines a series of sub-spaces, each with a key function (consume, walk, show, rest, gather and play, for the main part) and a specific development (traffic lanes, benches, plant containers, fountains, etc.). These functions and developments aim to create the specific atmospheres mentioned above.
- 33 In particular, the development of successive sections of the boulevard may be understood as a compromise between economic and habitability objectives [Corijn *et al.*, 2016]. On the one hand, the project testifies to the will not to create a simple neighbourhood, and to target inhabitants as well as visitors by defining relatively

neutral uses and facilities. On the other hand, the project seeks to restrict commercial activities in the public space in order to avoid an excess.

34 International research shows that in general, pedestrianisation favours an almost exclusive use of the road by certain commercial activities which privatise the public space (terraces, displays, etc.) to the detriment of sociocultural activities and leisurely walks [Mitchell, 2003, Dessouroux, 2006; Hass-Klau, 2015; Boussauw, 2016]. The development plan was intended to limit this phenomenon by ensuring a certain functional sharing of the public space. This partitioning of developments raises questions in at least three respects:

- A lot of the research shows that the *a priori* overdetermination of the functions of public space favours certain practices and, therefore, populations. By overdetermining the development of an area, there is the risk that certain categories of the population in terms of sociocultural status, gender, generation, etc. will take over [Amin, 2008; Gehl, 2011; Wood and Landry, 2008]. The mix and diversity of users and uses remain an important issue for the centre of Brussels and particularly its pedestrianised area, frequented by a population of mainly young people who are more often from the central neighbourhoods than from the outskirts [Keserü *et al.*, 2016; Wiegmann *et al.*, 2018; Fenton *et al.*, 2020], and mainly men in the evenings and at night [Fenton *et al.*, 2020];
- The development of successive sections of the boulevards reproduces a significant north-south linearity. The west-east direction is less pronounced, despite the declared will to reconnect it. Despite the presence of living spaces and a street-level layout, users reproduce their usual movement patterns, favouring window-shopping, strolling and slow wandering along the facades, while the central strip is rather used for transit traffic on foot and by bicycle (and other light vehicles) [Fenton *et al.*, 2020]. In between, terraces over-occupy the public space, particularly in the Bourse - De Brouckère section, without many restrictions (including in terms of type of furniture) and without it being clear how the mini green spaces will be used when the protective barriers surrounding them are removed. Conversely, it must be recognised that the low organisational level of the pedestrianised area before the works left the door open to multiple uses, “favouring the unexpected as well as the improvised”. It thus allowed “popular and informal creative resources” to be taken advantage of instead of “the risk of a public space which would slowly be devoted only to consumerism” [Genard *et al.*, 2016: 69];
- It is more difficult to ensure the quality of a public space when there are several different developments, stakeholders and instruments involved. For example, all of the material, plants and equipment used must meet technical constraints in terms of maintenance and use, durability, installation, etc. Equipment or materials which deteriorate rapidly, are not adapted to uses or do not match the environment in aesthetic terms, detract from the quality of the public space as a whole. In order to ensure the quality of this complex whole, it is not enough to follow construction standards. It requires continuous, coordinated and cross-cutting management. It should be noted here that after only a few months of intensive use, some surfaces have already deteriorated severely due to the authorised car traffic (e.g. Place De Brouckère or in the southern part of Boulevard Anspach) or are considered unsuitable by people with reduced mobility [Fenton *et al.*, 2020; Creten *et al.*, 2019].

35 In keeping with the multifunctionality which characterises the centre of Brussels [Decroly and Wayens, 2016], it therefore seems necessary to ensure the plurality of atmospheres and uses of the public space since it was closed to car traffic, in order to increase quality. This involves spatial development (facilities, type of urban furniture,

etc.), activities and the management of public space (commercial/tourist, sociocultural, artistic, sports activities, etc.) which we shall discuss in the following section.

2.1.2. Support and define activities in the public space

- 36 The *atmospheres* in the pedestrian area refer to intangible activities in the public space, which have become a true tool for urban policy [Bianchini and Parkinson, 1993; Pradel, 2007; Amin, 2008]. This issue may seem of secondary importance today, given the urgency of “resuscitating” urban centres after the covid crisis. But it will surely come back on the agenda with even more force. Genard *et al.* [2016] have highlighted the fact that activities in the pedestrian area constituted a central issue in the controversies, showing at least three major “visions” or “ideas” of the city centre and the public space: *commercial* public space, *political or symbolic* public space and *aesthetic or cultural* public space:
- For the advocates of *commercial* public space, the quality of the project for a pedestrian area is measured by its potential to be an impetus in terms of economy and tourism for the city centre, and even for the Brussels Region. This impetus is dependent on a series of guarantees, such as the security of the neighbourhood and ongoing activities in the public space;
 - For the advocates of *political or symbolic* public space, the first challenge involves the possibility for the population to appropriate the public space through participation in its design, co-production and co-management. The success of the pedestrian area is therefore partly due to its ability to symbolise the political and to be a welcoming place for events, activities, moments of celebration as a group, etc.;
 - For the advocates of *aesthetic or cultural* public space, it is thought of above all in terms of culture and experience. A vast space such as the pedestrian area must allow relationships of co-presence and co-visibility between strangers and produce an aesthetics of gatherings, stakeholders and spectators, following the example of the uses made of central boulevards in the 19th century [Jourdain and Loir, 2016]. It is therefore necessary for people to be able to experience this and not to be too distracted by consumer activities, for example.
- 37 As regards the pedestrian area, these three visions of the public space are potentially complementary, as long as they are all applied and managed in a cross-cutting approach. Until the covid crisis, the activities in the pedestrian area were nevertheless not very well defined in this perspective. They involved the accumulation of specific actions initiated by the public authorities or by private stakeholders. But they did not seem to be considered or taken advantage of as an integral part of the creation of atmospheres and the urban project based on the development of the pedestrian area, as designed initially by SumProject.
- 38 The literature shows that the activity in the public space is generally in keeping with a perspective of privatisation (economic or other), to the detriment of the value in use of the public space [Lefebvre, 1968; Decroly *et al.*, 2003]. The main roads with shops, restaurants and cafés are particularly prone to this mono-functional appropriation of the public space to the benefit of commercial activities, and to the detriment of sociocultural activities [Gravari-Barbas, 2001]. The pedestrianisation of these main roads reinforces this phenomenon [Boussauw, 2016], as confirmed by the case of Brussels [Fenton *et al.*, 2020].

- 39 Public intervention is therefore necessary in order to ensure a certain balance which allows a coexistence of the three visions of the public space (commercial, political and aesthetic) with respect to the pedestrian area. This involves establishing a calendar of activities with the stakeholders concerned, while ensuring “idle time” in order to avoid a saturation of events and activities, to let the pedestrian area have a life of its own and limit the feeling of constant encroachment experienced by the inhabitants. This also involves facilitating and developing expressive and artistic activities in collaboration with the local cultural operators, in order to prevent a predominance of commercial space. As for the political public space, it seems to be disappearing from the central boulevards, as demonstrations no longer take place there. It remains to be seen whether Place de la Bourse will once again become a space for expression and commemoration once it has been renovated [Fenton *et al.*, 2020].

2.2. Challenge 2: Connect the project to regional and metropolitan dynamics and link all of its dimensions together

- 40 The pedestrianisation of the central boulevards and the transformation of the centre of Brussels have an impact at three levels: local, regional and metropolitan [Genard *et al.*, 2016], and even international. We know that good coordination between levels and stakeholders concerned is necessary in order to ensure the success of complex urban projects [Le Galès, 1995, 2002; Pinson, 2004, 2009]. Furthermore, the presence of a multitude of ideas, interests, competences and motivations often requires the development of innovative instruments for public action in order to ensure the networking of projects [Boudry *et al.*, 2003; Van den Broeck, 2010; Moulaert *et al.*, 2013; Segers *et al.*, 2013].

2.2.1. Outside the perimeter: positioning the pedestrian area in a wider spatial framework

- 41 By removing the barrier formed by the urban motorway which the central boulevards had become, and by recreating the squares which existed along the original Boulevard Anspach, the pedestrian area aims to reconnect the east and the west (in the lower part) of the city centre: the reconnection of the Grand-Place neighbourhood and the Saint-Géry, Sainte-Catherine and Dansaert neighbourhoods via the Bourse, and beyond the canal towards Molenbeek; the reconnection of the Anneessens and Jardin aux Fleurs neighbourhoods and the Saint-Jacques and Marolles neighbourhoods via Parc Fontainas; and the reconnection of the Rue Neuve neighbourhood and the Quais neighbourhood via Place De Brouckère.¹⁴
- 42 While the project reconnects the east-west premodern fabric [De Visscher *et al.*, 2016] – which is a very important positive point – it does not define the desired impact of the pedestrianisation of boulevards on the connections between the city centre, the Region and the metropolis. What are the recommended relations with the other major projects and/or vectors of urban centrality, at the level of the Pentagon (Sablon, Marolles, redevelopment of the North-South junction, canal, inner ring, etc.), the neighbouring municipalities (Molenbeek in particular) and the Region (Porte de Ninove master development plan, Canal Plan, etc.)? The City of Brussels considers that the city centre is its business and the BCR does not contradict it very much on this point. Thus, it was only *in extremis* that the Regional Sustainable Development Plan (PRDD), adopted in

2018,¹⁵ underlined the specificity of the city centre within the framework of a metropolitan and polycentric vision of the city. For the first time in an official document, there was the suggestion to extend the limits of the city centre: “The city centre is commonly confined to the ‘pentagon’, the historical centre of the city. The developments in Brussels make it necessary to reconsider this area and to extend it in order to be in keeping with current realities” (p. 22). The PRDD also calls for “positioning the Pentagon and the urban projects which are being developed there within a broader framework (the city centre framework) so as to meet the need for a link between the city centre, the Region and the metropolis and to deepen its relations with other strategic projects in Brussels” (p. 61).

- 43 It is nonetheless true that the *city project* underpinned by the pedestrian area does not appear clearly in the communications of the City and BCR, which discourages the acceptance of the project by society [Vermeulen and Hardy, 2016]. Vanhellemont [2016] has shown that this has even stirred up controversies and has led to a loss of support from stakeholders who are in favour of the project. Furthermore, by focusing on the very local scale of the central boulevards and neighbouring streets, the project for the transformation of the centre of Brussels might not be able to achieve the desired paradigm shift.
- 44 It is therefore necessary to strengthen the possible relationships between the city centre and the other strategic projects in Brussels. This also involves working on the structural axes to be deployed in order to expand the city centre from east to west and from north to south
- 45 Although there is a difference in spatial scale, the project promoters – in particular the City of Brussels – could draw inspiration from the Internationale Bauausstellung¹⁶ (IBA), an instrument for urban planning and renewal developed in Germany. IBAs are flexible structures which unite – in a predetermined direction – a group of projects supported by different stakeholders in order to ensure overall coherence, while preserving independent project management. Usually ensured by a “chamber of quality” – i.e. a multidisciplinary follow-up committee which makes sure that the desired objectives are met, formulating practical recommendations and coordinated by a steward – their effectiveness is based on the fact that they are light and flexible governance structures which are established for the length of the project. These structures ensure the overall coherence of urban transformation, which is formalised via a multitude of projects, by combining efforts and facilitating collaboration between the various public institutions involved [APUR, 2009; Pinch and Adams, 2013; Shay, 2012].

2.2.2. Making the pedestrian area one of the milestones of an ambitious mobility policy at regional and metropolitan level

- 46 Contrary to the (semi-)pedestrianisation projects which are often cited as examples (Copenhagen, Bordeaux, Barcelona, Lyon, Ghent, etc.), the pedestrian area in Brussels is struggling to become part of a mobility policy at regional and metropolitan level [Brandeeler *et al.*, 2016a; Boussauw, 2016; Keserü *et al.*, 2016].
- 47 It is not – or scarcely – connected to the other spaces which have been made into pedestrian, gathering, etc. areas, or which are being developed for these purposes in the Brussels-Capital Region [Brandeeler *et al.*, 2016a] (see Figure 3). It has therefore not

allowed a strong increase in the use of active means of travel (bicycle, walking, etc.), as opposed to the lockdown and the measures which accompanied it. The coherence of infrastructures and the connectivity of journeys have a deciding influence in this respect [Gehl, 2011; Saelens, 2003; Craig *et al.*, 2002; Handy *et al.*, 2002].

- 48 The extension of the pedestrian area has also not been an occasion to reinforce the accessibility of the city centre by public transport and/or increase the frequency of service [Keserü *et al.*, 2016], while 27 % of the inhabitants of Brussels do not have easy access to the centre via public transport, given their distance from it [Lebrun, 2016]. On the contrary, the modification of the STIB/MIVB bus network which accompanied the pedestrianisation of the central boulevards was not exactly beneficial as regards service to and from the centre (reduction in the “legibility” of the terminals, more complex connections, removal of dedicated transport corridors, etc.). The nagging question of the structuring of bus lines (through or destination lines) and the location of bus terminals has still not been resolved, as has the question of the creation of a structuring east-west tram line. The international literature shows how essential easy access by public transport is for the success – in particular, the economic success – of pedestrian areas [Sandahl and Lindh, 1995; Boussauw, 2016]. Here too, the covid crisis has not contributed to the promotion of public transport, even if it has led the City of Brussels to re-establish certain separate lanes for buses in the centre.
- 49 As regards motorised travel [Keserü *et al.*, 2016], the view that the city centre has become inaccessible (also due to the “tunnel crisis” or the partial closure of Bois de la Cambre as part of the covid measures) has not been thwarted by a *park & ride* policy reinforced at regional and metropolitan level, while signage and electronic signs for public car parks were implemented late and are still not perfect today.
- 50 The systems for the delivery of goods are having trouble adapting to the pedestrian area due to a regional policy which is not yet fully operational [Verlinde *et al.*, 2016].
- 51 This situation is common in Brussels. The institutional context, the multitude of stakeholders involved and the diverging opinions prevent the development of a coherent and ambitious mobility policy [Courtois and Dobruszkes, 2008], to the benefit of scattered actions, which are developed on a “case by case” basis [Moritz, 2011: 12]. Analyses of pedestrianisation projects carried out in the 1960s and 1970s have highlighted the fact that isolated solutions have not allowed the problem of car traffic and the co-existence of various modes of travel to be solved [Fériel, 2013]. We must not disregard the potential “mass effect” which could result from the multiplication of qualitative projects in favour of active forms of mobility. In this respect, the emergency measures taken in the context of the covid crisis are an example of the mass effect sought by the “Good move” Regional Mobility Plan (RMP).

2.2.3. Connecting the public space development plan to commercial, economic, tourism and heritage promotion development plans

- 52 The implementation of the pedestrianised area aims in particular to boost economic activities in the city centre, especially retail, which is currently undergoing a major reorganisation phase in response to changing consumer practices, and which is developing its offer in other parts of the city, notably through recently opened or planned shopping centres (such as the one included in the City of Brussels Neo project). To this day, the pursuit of this objective has essentially opened the door to

development studies on its commercial future conducted by GeoConsulting (commercial development perspective for the city centre) and Citytools/Devimo (management of commercial property belonging to the property management service and located in the pedestrian area).¹⁷ While the economic impact of pedestrianisation has received little attention, Boussauw [2016] presents a review of the literature which identifies useful information with respect to the case of Brussels:

- As it cannot be ensured by the resident population alone, the economic success of pedestrian areas is related in particular to the presence of commercial as well as cultural, administrative, educational, etc. hubs which allow them to differentiate themselves from shopping centres, for example [Bromley *et al.*, 2003];
- Whitehead *et al.* [2006] have shown that overall – following a downturn of about two years – pedestrianisation has led to an average increase in visitors, sales revenue and rental prices for commercial space. But this increase is asymmetrical, benefitting organised trade (franchisees, branches), mainly in the areas of clothing and restaurants/café [Mérenne-Schoumaker, 1981, 1983]. This is what seems to be happening today in the Brussels pedestrianised area, with probably a serious drawback for the clothing sector, which is subject to the threefold pressure of e-commerce, developments in the outskirts and the covid crisis. The latter is also seriously damaging the HORECA sector with the cessation of tourism, international meetings and the tourism sector, as well as with the predominance of teleworking;
- Conversely, the improvement in economic attractiveness thanks to pedestrianisation may lead to the disappearance of other types of business, mainly in the sectors which do not benefit from higher profits related to an increase in traffic that leads to a proportional rent increase [Wong, 2014]. A commercial turnover therefore tends to establish itself at the expense of a diversity of supply in the city centre, which constitutes an advantage with respect to shopping centres in outlying areas [Grimmeau *et al.*, 2004]. This evolution is also accelerated by the development of mass tourism and the resulting “touristification” of shops [Wayens *et al.*, 2020], which, however, is experiencing a serious setback with the covid crisis. All of this often takes place to the detriment of the neighbourhood city, i.e. economic supply addressed above all to the inhabitants (thus having an impact on the profiles of users of the public space);
- However, the economic success of a pedestrian area also depends in part on the density of the resident population and its purchasing power [Boussauw, 2016]. Since the beginning of the 2000s, the centre of Brussels has experienced significant demographic growth which involves an increase and a diversification of needs for services and local businesses (schools, nurseries, sports activities, daily shopping, etc.) [Van Criecken, 2006, 2013; Decroly and Wayens, 2016]. The importance of local (and regional) aspects in ensuring the economic success of the pedestrian area in Brussels seems all the more important considering the decline in pedestrian areas in North American city centres since they first appeared in the 1980s, which is partly explained by the fact that mobility culture is focused traditionally on accessibility by car [Faulk, 2006], as it is in Belgium;
- Finally, the economic success of pedestrian areas is also linked to a certain flexibility of uses in time, on a daily basis (with the special challenge of the night, which can make a city centre uninhabitable) as well as over the years, according to urbanistic and economic reorganisation. Among others, the quality and flexibility of developments must be ensured with regard to the many worksites which exist throughout the life of a commercial area during reorganisation/renovations, which are much more frequent than for other functions.

- 53 In terms of activities, a balance must therefore be established between the city of leisure and tourism, and the neighbourhood city, similar to the Local Urbanism Plan for Paris, which was adopted in 2006 [ARAU, 2014]. The covid crisis prompts us to do so. In this respect, the economic dimension of the pedestrian area must not be considered only in commercial and tourism terms, and must better integrate the cultural, administrative, health, educational, etc. aspects which characterise the centre of Brussels [Decroly and Wayens, 2016]. And, spatially, the reflection should not only take into account the boulevards and Rue Neuve, because a good part of the shops which make up the specificity and commercial originality of a city centre (especially those which are highly specialised in terms of product or public) tend to be located on its margins [Grimmeau *et al.*, 2004].
- 54 It is also necessary to connect the heritage promotion plans to the development of public space. Among others, the pedestrianisation of Boulevard Anspach represents an occasion to promote its heritage, which has been altered over time (loss of homogeneity, transparency and identity), with the presence of equipment (benches, lighting, etc.) and a plan for façades/signs [Jourdain and Loir, 2016], bearing in mind that heritage quality is also a source of attractiveness [Grimmeau and Wayens, 2003]. Such a plan does not seem to be under way yet and a city official is currently working alone to try to save what can be saved, especially in the interiors of buildings.

2.3. Challenge 3: Working together on an urban and metropolitan project

- 55 The debate regarding the pedestrianisation of the central boulevards was heated, taking place in the political arena and in society, with the involvement of the media. The context of the controversies regarding the requests for planning permission is complex [Vanhellemont with Vermeulen, 2016; Vanhellemont, 2016] and involves many aspects of urban reality and different ideas of Brussels, its public spaces, mobility, inequalities, economy, etc. [Genard *et al.*, 2016]. The controversies are not limited to an opposition between authorities and citizens, shopkeepers and inhabitants or motorists and cyclists. On the contrary, potential and expected supporters of the project have opposed each other and still do to this day [Vanhellemont, 2016]. There are many reasons for this complexity:
- Due to the diversity of functions and uses, the status of city centre emphasises the diverging points of view in terms of needs, expectations, challenges, risks, etc. In this respect, even if it is not always explained clearly by the stakeholders, the question as to the level (local, regional, metropolitan) at which the city should be considered is at the heart of the debates [Tessuto, 2016; Genard *et al.*, 2016];
 - As in many major urban projects [De Rynck and Dezeure, 2009] and as presented above, the compromises made in the political and administrative arena have interfered with the favourable reception of the political aim of the project [Vanhellemont, 2016];
 - Conversely, by exacerbating the terms of the debate, many stakeholders (project promoters as well as their “opponents”) have played a part in spreading a simplistic vision of the project throughout society [Vanhellemont with Vermeulen, 2016].
- 56 There are many controversies regarding the implementation of major urban projects [De Rynck and Dezeure, 2009], and the projects involving (semi-)pedestrianisation are no exception [Boussauw, 2016; Vermeulen and Hardy, 2016]. At the same time, the

analysis of examples in other countries shows that the authorities should build on the conflicts (at least in part) in order to carry out complex large-scale urban projects [Pinson, 2009; Castillo-Manzano, 2014], win the support of civil society, private, semi-public and public stakeholders and thus ensure the realisation of the project and its *effective* appropriation.

2.3.1. Develop a communication policy which is equal to the project

- 57 Until now, the City of Brussels has been responsible on its own for organising official communication regarding the pedestrian area. Different services have shared the task according to their competences. The communication department for the City manages the production of various tools to promote the pedestrian area (kiosks set up on site, flyers, a brochure, a video, etc.). The public peace department manages a contact point via email and on several occasions (between the end of 2015 and 2016) has worked with the public stakeholders involved in order to establish joint answers to the questions received. Brussels Major Events (BME) set up an information kiosk at Place de la Bourse for a certain time. At the same time, many public and private stakeholders have communicated about the project, in particular via the media. When it comes to the pedestrianised area, the City's policy today is essentially reactive, as in the example of the alcohol ban introduced for six months from 1 February 2020, following a media campaign pointing the finger at this problem. The dominant strategy is to communicate as little as possible for fear of rekindling past controversies. Consequently, contrary to what is done in other cities (see, for example, the Ile de Nantes renovation project¹⁸), a global communication strategy for this major urban and metropolitan project has not been implemented in coordination with the different stakeholders concerned. However, large parts of the Brussels and metropolitan population, in particular those which have long since deserted the city centre, are still far from supporting the project [Wgmann *et al.*, 2018 ; Fenton *et al.*, 2020], all the more so in the covid context.
- 58 In order to better understand the challenge regarding the future of the city centre, it is therefore necessary to adopt a cross-cutting communication strategy, bringing together all the actors involved in the project, while ensuring a certain transparency. The Brussels-Capital Region should be involved in this policy by developing adapted means of support. There is also a need to adopt a proactive approach, taking into consideration not only those who seek information. Finally, special attention must be given to the celebration of the main steps of progress of the project.

2.3.2. Organise transversality and co-production

- 59 Participation constitutes one of the key aspects of the controversies – such as the one concerning the centre of Brussels – or at the very least, insufficient participation often represents one of the arguments put forward by certain critics of major urban projects. Participation is subject to power relations, and in essence does not ensure the democratic nature of a project [Le Naour and Massardier, 2013]. One may also consider that, given the scope of the challenges, the limitation of the participatory process allows the “taking of action” and the implementation of a project which could never

reach a consensus. However, the literature highlights a series of elements which show the importance of establishing room for participation, i.e. co-production:

- The implementation of participatory processes could favour the acceptance of a project and bring all of the stakeholders together in the same approach [Pinson, 2004; Vermeulen and Hardy, 2016];
 - These processes also provide an opportunity to take advantage of the common knowledge of stakeholders in the field. This common knowledge, which experts and politicians do not necessarily have, constitutes a basis in order to ensure that the project is in keeping with the reality in the field [Callon *et al.*, 2001]. In this sense, participation allows the needs and expectations of inhabitants, users, shopkeepers, etc. to be met, the problems encountered to be highlighted, and the efficient means of action to be defined [Lascoumes and Le Bourhis, 1998];
 - The co-production and co-management of a project favours the development of a feeling of belonging to a place and, therefore, respect towards it [Vermeulen and Hardy, 2016].
- 60 The opening of project implementation to different fields of co-production would thus allow an improvement of its quality. There are at least three pertinent levels of co-production: economic co-production through dialogue on the economic and commercial development of the city centre; intangible co-production concerning activities in the public space and the *material* co-production of the public space.
- 61 However, in order for co-production involving stakeholders outside the strict sphere of political decision-making to be possible, transversality is necessary within the governing bodies. It has to be said, however, that there is a great deal of compartmentalisation between departments and areas of competence within the City of Brussels, and until recently, a certain reluctance to collaborate with the regional level.

2.4. Challenge 4: Confirm the paradigm shift

- 62 The pedestrianisation and redeployment of the city centre were initially presented by the project leaders, in particular the mayor of the City of Brussels, as the formalisation of a paradigm shift with respect to post-war urban policies. The implementation of this paradigm shift is, however, faced with major difficulties.
- 63 Firstly, the project is not located in an ordinary neighbourhood, but rather in a multifunctional city centre with many different users (underprivileged and privileged inhabitants, workers, tourists, customers, etc.) who have different relationships with the city centre, which are sometimes difficult to reconcile [Decroly and Wayens, 2016; Genard *et al.*, 2016; Van Crieckingen, 2006, 2013; Van Hamme *et al.*, 2016].
- 64 Secondly, the project is torn between the usual feebleness of Brussels decision-makers with respect to reducing the influence of car traffic [Courtois and Dobruszkes, 2008] and the increasing rejection of cars to the benefit of non-motorised mobility [Genard *et al.*, 2016; Genard and Neuwels, 2016].
- 65 Moreover, for a multitude of institutional levels and public stakeholders, the project is based on a diversity of visions of the city, its centre, motivations and objectives [Vanhellemont, 2016]. The challenge in this respect is to ensure that the necessary compromises do not reduce the impact of the project.

- 66 Last but not least, the covid crisis tends to exacerbate these tensions and invites us to rethink the future of urban centres in a new light.

2.4.1. Taking action on and via housing

- 67 On the part of the public authorities, the pedestrianisation of central boulevards is justified in particular with regard to two major joint objectives: “to go from being a utilitarian city designed for car transit, to a city designed for its inhabitants and where it is nice to live”; and “to revitalise economic activity in the centre” by targeting visitors for the most part (workers, tourists, consumers, culture enthusiasts, etc.).¹⁹ On the contrary, the analysis of debates highlights the role of the opposition between “inhabitants” and “visitors” in the controversies [Vanhellemont, 2016; Tessuto, 2016; Genard *et al.*, 2016], implying that the two objectives revealed by the public authorities would be difficult to reconcile. The pedestrian area would prejudice certain categories of stakeholders, namely the inhabitants and/or shopkeepers in the city centre, depending on the point of view.
- 68 Many international projects testify to the fact that the improvement in habitability and economic revitalisation are not antagonistic, but that precautions must be taken in order to ensure a balance. The literature shows that the economic success of pedestrian areas depends in particular on residential density [Boussauw, 2016]. At the same time, it highlights two possible harmful effects of pedestrianisation on the residential sector, which are visible when there is too much of a focus on commercial attractiveness:
- The creation of a pedestrian area generally results in an increase in rental prices for commercial space [Sandahl and Lindh, 1995; Boussauw, 2016], which favours the mono-functionality of the area. Therefore, it sometimes becomes economically more worthwhile to make all of the available commercial space in a building profitable and not to use the upper floors for residential purposes, not to mention the fact that it often becomes difficult to access these floors [Dessouroux, 2006];
 - The predominance of the commercial function also hinders residential attractiveness, as disturbances due to activities in pedestrianised public spaces cause the middle and well-to-do classes to leave [Wackermann, 1982].
- 69 The Pentagon has experienced strong demographic growth which is heterogeneous from a socioeconomic point of view. This leads to an increase in *and* a diversification of housing needs, subject to pressure by the development of the residential tourist offer, and especially rooms or flats, or even entire buildings made available on the Airbnb reservation platform. In 2017, the latter accounted for nearly one-third of the housing capacity in the BCR [Decroly *et al.*, 2019] and a significant share of the total number of private dwellings in parts of the Pentagon [Decroly and Wayens, 2016]. But, as we know, this sector has been badly affected by the covid crisis.
- 70 It is therefore essential to take action on and via housing. This involves ensuring residential attractiveness while maintaining a balance at two levels: on the one hand, between the necessity to revitalise the city centre and the risk of gentrification and, on the other hand, between the increase in temporary housing (Airbnb, hotels, bed and breakfasts, etc.) and the need for permanent inhabitants. The question therefore arises as to the strengthening of technical and legal levers which favour or require the maintenance of residential functions in commercial and tourist areas [in particular ERU

2001-2012; 2012-2014; Decroly *et al.*, 2019], and the future of buildings which belong to the city and the Brussels CPAS located in the pedestrian area and its surroundings.

2.4.2. Preventing the transfer of pollution

71 The car-free areas and the areas with low emissions may improve the quality of life of inhabitants and workers in three ways: (1) by improving air quality through a decrease in the emission of air pollutants [Genc *et al.*, 2012; Lim *et al.*, 2012; IBSA, 2016], (2) by reducing the noise caused by road traffic, and (3) by favouring the use of active modes of travel [Gehl, 2011; Keserü *et al.*, 2016]. In order to achieve the desired paradigm shift, the challenge is to allow these improvements to benefit the entire city and not only the pedestrian area. This challenge, which was greatly reduced with the covid crisis, should be monitored during the recovery:

- The feedback from North American projects from the 1960s and 1970s indeed shows that the pedestrian areas themselves do not allow a decrease in the use of cars and therefore do not regulate the pollution they cause [Ferié, 2013]. They may lead to a shift of traffic and pollution to the surrounding streets. In order to have a positive impact beyond the area of intervention, pedestrianisation must be integrated into an ambitious mobility plan which ensures a modal shift.
- The extent, content (air, noise, etc.) and scope of the impact of the pedestrian area in Brussels have not been the object of an exhaustive and continuous evaluation. Measures have been established but they have been carried out in an isolated manner by different sources (Bruxelles Mobilité, Atrium, ProVélo, City of Brussels), according to different methodologies and timescales [Bruxelles Mobilité, 2016]. Due to a lack of a systematic collection of data, it is very difficult to evaluate the quality of results. At the same time, the data gathered concern volumes of traffic and do not provide a detailed interpretation of the situation (for example, modal shares, effects due to car traffic, etc.);
- Although it is quantitatively minimal, the shifting of car traffic to certain neighbouring streets may increase the deterioration in air quality tenfold, as it depends in particular on urban morphology [Keserü *et al.*, 2016] (for example, around the Central Station and Boulevard de l'Empereur, an increase of 270 vehicles/hour [Bruxelles Mobilité, 2016], Quai du Commerce or Rue des Six Jetons). Air pollution is evacuated less easily in narrow streets;
- Although the volume of traffic stagnates or decreases, it is possible that car traffic might increase in certain streets, thus increasing noise pollution and air pollutants;
- The shifting of traffic to the neighbouring streets can discourage the use of active modes of travel and have a negative impact on the commercial speed of public transport [Keserü *et al.*, 2016], as we can see in particular during major events (Plaisirs d'hiver, etc.);
- The excessive development of activities in the pedestrian area could hinder the suppression of noise caused by road traffic;
- The shift of pollution and the creation of new types of pollution ignite controversies [Vanhellemont, 2016; Genard *et al.*, 2016].

72 In order to ensure the sustainability of the city centre, the pedestrianisation of central boulevards is insufficient in itself. At the same time, there is a very real risk of a shift of pollution to the streets surrounding the pedestrian area. Various monitoring efforts under way will allow an objective look at the situation and could constitute the basis for the revision of traffic and mobility plans.²⁰

2.4.3. Integrate the existing car parks into the reflection on the evolution of the pedestrian area

- 73 As a consequence of post-war urban policies, the centre of Brussels is characterised by the presence of a very high number of private and public car parks [Hubert *et al.*, 2013]. As far as we know, the gradual reduction in the number of existing car parks when environmental permits are renewed is not on the agenda of the City of Brussels and Bruxelles Environnement (which issues these permits). The presence of these car parks has a direct impact on the configuration, organisation and perimeter of the current and future pedestrian area, as well as on the air quality in the city [Brandeleer *et al.*, 2016a; Keserü *et al.*, 2016]:
- The existing (off-street) public car parks in the Pentagon provide approximately 25 000 parking spaces (i.e. much more than in other city centres with a comparable surface area), and play a “role as an ‘attractor’ of cars” in the heart of the pedestrian area or in its immediate surroundings [Hubert *et al.*, 2013];
 - These car parks, whose access must be legally guaranteed, have determined the perimeter of the pedestrian area (for example, Rue de l'Ecuyer and Rue Fossé-aux-loups);
 - They limit the possible future widening of the pedestrian area (other cities, such as the City of Ghent, have faced this difficulty);
 - Their number and scattered location make it difficult to design P-routes²¹ allowing a means to enter and exit car parks.
- 74 An action which suggests that cars are no longer welcome in the city leads to heated debates in the public sphere as well as in the political arena [Courtois and Dobruszkes, 2008]. In the framework of the pedestrian area, these debates were stirred up by the lockdown following the Paris attacks, the effects of the Brussels attacks and the closing of the tunnels, which gave the impression that the city centre was no longer accessible by car [Vanhellemont with Vermeulen, 2016; Genard *et al.*, 2016]. They have reappeared today with the covid crisis.
- 75 Brandeleer *et al.* [2016a] thus feel that, to a great extent, the pedestrianisation of the centre is restricted by the presence of car parks and not the reverse. If their pertinence is not called into question, the power relations will always be established in favour of parking infrastructures. The ability for the city centre to create a paradigm shift may be limited.

2.4.4. Achieving a true sharing of public space

- 76 The notions of *comfort* for pedestrians, *hospitality* of public spaces towards walking or *mechanisms for accelerating slowness* [Pelgrims, 2018] are expressed through the safety of slow routes, obtained through the domestication of car flows, and the spatial and temporal continuity of facilities [Pelgrims, 2018].
- 77 But the modal segregation of public space, i.e. the clear separation of the spaces devoted to each mode of transportation within the public space [Brandeleer *et al.*, 2016], is deeply rooted in Belgium, and particularly in Brussels. Its roots go back to the end of the 18th century [Loir, 2016]. It did not disappear with the pedestrianisation of certain fragments of the central city. Thus, it can be found in the accounts of users, as well as in the development of the central boulevards [Fenton *et al.*, 2020]. The longitudinal morphology and the organisation of the width of the main sections of the

boulevards contribute to the reproduction of “classic” travel patterns (pedestrians on the sides, two-wheelers and other vehicles – when they can enter – in the central strip). The modal segregation which is implicit to this morphology is reinforced through certain layouts, such as the change of surface for the different lanes in the boulevard or the massive presence of bollards, classic symbols of this modal segregation, between areas where motor vehicles are allowed and those where they are not. However, at times of high density pedestrian flows, segregation between modes and rhythms of travel becomes more complicated. Pedestrians occupy the whole area in a more homogeneous way and make it impossible to mix modes of travel. Clashes and frictions appear and often fuel debates on ideas of the city for pedestrians, reinforcing the archetype of modal segregation in the eyes of some. Consequently, modal segregation often remains the standard according to which the functioning of public space is assessed and perceived, both in terms of efficiency and safety. It conflicts with the principle of a shared space, which implies the coexistence of different modes of transport within the same space, without physical arrangements necessarily marking their separation. For such a novelty to become permanent, restrictions are clearly not enough, especially if an idea as prominent as that of modal segregation continues to occupy people's minds. A change of mentality through a long-term informative and educational effort is necessary. But it also involves relieving the pressure on a city centre which, at certain times, concentrates too much pedestrian flow.

- 78 If a sharing of public space between all modes of travel remains to be achieved at city level, avoiding an over-occupation of space by one mode to the detriment of all of the others, the same applies to the balance between traffic and living functions. The standardisation of facilities and the little diversity possible in the uses of public space (apart from traffic and consumption) reduce “the plurality of ways of being and, therefore, the richness of the urban atmosphere” [Pelgrims, 2018].
- 79 In this context, the Brussels public space undoubtedly needs a form of relief with the help of an ambitious social policy. As Wayens and colleagues [2020: §104] write, “the increase in homelessness is widespread in Brussels [Quittelier and Horvat, 2019] and is reinforced by flows of migrants associated with political instability and many conflicts at international level. As long as care for these people is insufficient and limited to the night, the pedestrian area, consisting mainly of commercial spaces, will remain, for many reasons (social control, specific urban morphology, availability of boxes, pedestrian flows, etc.), havens for marginalised populations in the urban space [Malherbe and Rosa, 2017]. (...) A purely security-based response is obviously inappropriate given the scale of this social crisis, but it is high time to invest massively, together with shopkeepers, in a pragmatic and humane management of the issue of homelessness and marginality in the public space.”

Conclusion

- 80 Successful pedestrianisation and redevelopment of a city centre are not a given. As seen in the literature, various precautions must be taken and many aspects must be dealt with. The realisation of a complex urban project requires the collaboration of stakeholders and services which are not necessarily in the habit of doing so, the combination of different and even competing levels of governance, the creation of positive political and civic dynamics regarding the project, and taking advantage of and

developing the levers for action which allow the long-term goals of the project to be reached, etc.

- 81 In this synopsis, we have highlighted four possible areas for improvement. This would involve (1) adding to the spatial planning by taking action on the intangible aspects, and through better planning of the different atmospheres and social, commercial and artistic activities in the city centre; (2) including the project in a multi-scale vision of territorial development and associating it with different plans (mobility, environmental, trade, tourism, culture, social, housing, etc.); (3) increasing the support for the project by qualitative improving information and communication, as well as participation and coproduction, and strengthening the transversality within and between the governing bodies; (4) deepening the paradigm shift by clarifying the anticipated city project, as outlined by the PRDD. These approaches – already mentioned in the first version of this synopsis [Hubert *et al.*, 2017] – are still completely relevant in the covid context.
- 82 The project for the redevelopment of the centre of Brussels is still far from completed. Given the extent and the range of challenges, stakeholders, instruments and levels of action, it is more than ever necessary to implement – as was recently done for the BeursBourse project – a cross-cutting operational structure coordinated by an independent steward recognised by all of the stakeholders, and who would be responsible for the organisation of structured meetings with stakeholders in the field as well as the creation of a “chamber of quality”. The latter, composed of recognised experts and representatives of the different levels of authority involved (City, Region, Beliris, etc.), would ensure compliance with the defined objectives and the quality of the implementation of the project. This method has been successful for more than ten years in many European cities, such as Amsterdam, Antwerp and Zurich [Moulaert *et al.*, 2013; Segers *et al.*, 2013]. In this context, the maintenance of a city centre observatory such as BSI-BCO²² makes sense in order to monitor the evolution of social uses and practices, habitability, air quality, mobility and accessibility, economic, commercial and tourism dynamics, larger scale effects, etc. But also to explore and experiment with the implementation of the aforementioned city project through action research and *research by design* mechanisms.

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NOTES

1. This synopsis is an update of the synopsis published in *Brussels Studies* on 11 September 2017, and is based in particular on the work published by BSI - Brussels Centre Observatory (<http://bco.bsi-brussels.be>), whose authors we wish to thank.

2. The final pedestrianisation of the Grand-Place and its surrounding streets did not take place until 1991.
3. CITY OF BRUSSELS. Un nouveau centre-ville ambitieux et dynamique, In: *Ensemble, faisons battre le cœur de Bruxelles (Centre-ville Bruxelles)* [online]. Retrieved on 23 February 2017. Available at the address: <http://centre-ville.bruxelles.be/fr/le-projet/objectifs>
4. *Ibid*
5. Online: <http://www.eru-urbanisme.be/fr/print/project/57/>. Retrieved on 7 January 2020.
6. Online: <https://monitoringdesquartiers.brussels>
7. Following the Cooperation Agreement of 15 September 1993, the federal government committed itself to carrying out and financing a series of interventions in the Brussels territory in the areas of mobility, green spaces, culture, heritage, social housing, etc. These interventions are ensured by the Beliris administration (from the name of this cooperation agreement), which is part of SPF Mobilité et Transport.
8. Association des Non Motorisés – Autrement mobile. At the time of writing (January 2020), this plan was still available on the Bral website (bral.brussels).
9. These car park projects were abandoned gradually following the opposition to them (in particular, the plan to build a car park under Place du Jeu de balle in the Marolles neighbourhood).
10. CITY OF BRUSSELS, 2015. *Ensemble, faisons battre le cœur de Bruxelles*, p. 3
11. Temporary closure of several road tunnels for access to or around the city centre, following falling rock due to the deterioration of these engineering structures dating from the 1950s and 1960s. The Brussels-Capital Region was obliged to implement a vast renovation plan as a matter of urgency, avoiding a debate on the future of this modernist infrastructure [Hubert, 2008].
12. See for example “Piétonnier sur les boulevards du centre de Bruxelles : le début des travaux”, RTBF, 22 June 2015, https://www.rtb.be/info/dossier/tout-savoir-sur-le-nouveau-pietonnier-bruxellois/detail_pietonnier-sur-les-boulevards-du-centre-de-bruxelles-le-debut-des-travaux?id=9013287, retrieved on 19/01/2020.
13. According to the title of the work by Jan Gehl [2011]
14. CITY OF BRUSSELS, 2015. *Ensemble, faisons battre le cœur de Bruxelles*, p. 11
15. <http://www.prdd.brussels>
16. <https://www.open-iba.de/en/>
17. Studies financed respectively by the City of Brussels (2015) and Régie Foncière de la Ville de Bruxelles (2016).
18. <http://www.iledenantes.com/fr/>
19. CITY OF BRUSSELS, 2015. *Ensemble, faisons battre le cœur de Bruxelles*, p. 3
20. In particular the BSI-MOBI project “Monitoring the impact of travel behaviour, accessibility & satisfaction with regards to the city centre”, supported by Bruxelles Mobilité.
21. A “Parking route” or “P-route” is a marked circuit, generally in a loop, which leads motorists from outside the area concerned towards one or more car parks, and which allows them to leave the area easily.
22. On the challenges of regional observatories such as BSI-BCO, see in particular Roux and Feyt [2011].

ABSTRACTS

The new pedestrian area has been one of the main urban projects designed for the centre of Brussels in recent decades. In 2015, the transit route in the city centre - Boulevard Anspach - was closed to traffic. The redevelopment of public space and the renovation of the main metro stations are now nearing completion. The finalisation of this urban project and the challenges it has faced are, by definition, complex. Experiences elsewhere in the country and abroad, as well as the data collected by BSI-BCO, show that it will have a significant impact at different levels: quality of public space, housing and facilities, local economy and employment, mobility, accessibility and logistics, social and cultural activities, etc. This synopsis is an update of a previously published work (no 115). Part 1 sets out the general context of this project which has not been spared by several external crises (lockdown following the attacks in Paris, attacks in Brussels, the tunnel crisis and, of course, the covid crisis). Part 2 develops the challenges which remain. In conclusion, this synopsis proposes some concrete ways to improve the quality and management of the project.

Le *nouveau piétonnier* est l'un des principaux projets urbains conçus pour le centre de Bruxelles au cours des dernières décennies. C'est en 2015 que la voie de transit du Centre – le boulevard Anspach – a été interdite à la circulation automobile. Le réaménagement de l'espace public et la rénovation des principales stations de métro sont aujourd'hui en voie d'achèvement. La réalisation et les défis de ce projet urbain sont, par définition, complexes. Des expériences menées dans le pays et à l'étranger, ainsi que les données réunies par le BSI-BCO, montrent qu'il aura un impact important à différents niveaux : qualité de l'espace public, logement et équipements, économie locale et emploi, mobilité, accessibilité et logistique, activités sociales et culturelles, etc. La présente note de synthèse met à jour un travail publié précédemment (n°115). La partie 1 expose le contexte général de ce projet qui n'a pas été épargné par plusieurs crises externes (*lockdown* suite aux attentats de Paris, attentats de Bruxelles, crise des tunnels et, bien entendu, crise du covid). La partie 2 développe les défis qui subsistent. En conclusion, la note propose quelques pistes concrètes d'amélioration de la qualité et de la gestion du projet.

De *nieuwe voetgangerszone* is een van de grootste stadsprojecten die de afgelopen decennia ontworpen zijn voor het Brusselse stadscentrum. In 2015 werd de Anspachlaan, een transitweg, verboden voor autoverkeer. Intussen zijn de heraanleg van de openbare ruimte en de renovatie van de belangrijkste metrostations bijna klaar. De uitvoering en de uitdagingen van dit stadsproject zijn per definitie ingewikkeld. Uit ervaringen in zowel binnen- als buitenland en de gegevens van het BSI-BCO blijkt dat het project op verschillende vlakken een grote impact zal teweegbrengen: kwaliteit van de openbare ruimte, huisvesting en voorzieningen, lokale economie en werkgelegenheid, mobiliteit, bereikbaarheid en logistiek, sociale en culturele activiteiten, enz. Deze synthesesnota vormt een update van een eerder gepubliceerde nota (nr. 115). Het eerste deel schetst de algemene context van het project, dat niet gespaard werd door verschillende externe crisissen (*lockdown* na de aanslagen in Parijs, de aanslagen in Brussel, de tunnelcrisis en de coronacrisis uiteraard). Het tweede deel gaat dieper in op de uitdagingen waarmee het project nog altijd geconfronteerd wordt. In het besluit reikt de nota enkele concrete pistes aan voor de verbetering van de kwaliteit en het beheer van het project.

INDEX

Keywords: public action, economic development, public space, mobility, urban planning, quality of life, urban renewal

Trefwoorden action publique, développement économique, espace public, mobilité, planification urbaine, qualité de vie, rénovation urbaine

Subjects: 7. aménagement du territoire – logement – mobilité

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